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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/518,378

02/08/2005

Geir Jensen

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DENNISON, SCHULTZ & MACDONALD  
1727 KING STREET  
SUITE 105  
ALEXANDRIA, VA 22314

EXAMINER

FONSECA, JESSIE T

ART UNIT

PAPER NUMBER

3633

MAIL DATE

DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/518,378	<b>Applicant(s)</b> JENSEN, GEIR	
	<b>Examiner</b> JESSIE FONSECA	<b>Art Unit</b> 3633	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 December 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 18-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 18-20 and 22-28 is/are rejected.
- 7) ☒ Claim(s) 21 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12/19/07 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |



## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/19/07 has been entered.

### ***Claim Objections***

Claim 1 is objected to because of the following informalities:

Claim 1 (line 5 of the claim): It appears applicant inadvertently misspelled --grille- - as "grill". Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 18-19 and 25-27 are rejected under 35 U.S.C. 102(b) as being anticipated by Lamb (US 2,279,791).

With regards to claim 18: Lamb discloses a ventilation device (fig. 3) capable of passing air therethrough, and including an upstream side and a downstream side, the ventilation device including a passive fireblocking means comprising:

at least one grille body (22) on the upstream side comprising a plurality of evenly distributed openings permitting air flow therethrough, the grille body (22) being coated with an intumescent material (16) (figs 2 & 3; col. 1, line 45 - col. 2, line 11); and

adjacent to and downstream from the at least one grille body (22), at least one thermally conductive metal mesh (20) permitting air flow therethrough,

wherein the intumescent material (16) swells when exposed to sufficient heat to close the event distributed opening, and the metal mesh (20) has a capacity for heat storage (col. 2, lines 3-11).

With regards to claim 19: Lamb discloses a metal mesh (20) is three-dimensional.

With regards to claim 25: Lamb further discloses air filters which serve as insulating material as its provides an isolation of an area between the grille body (22) and metal mesh (20) It is noted that that a metal mesh is located on both ends of ventilation device (fig. 3) capable of serving as a thermal break as it's barrier between the grille body (22) and metal mesh (20).

With regards to claim 26: Lamb discloses a grille body (22) oriented adjacent metal mesh (20) which is capable of being positioned towards a potential source of flame. It noted that language directed to the orientation of the of ventilation device is considered nomenclature as the device is not attached to a structure, the ventilation

device of Lamb is capable of being oriented vertically so as to have the grille body oriented below the metal mesh.

With regards to claim 27: The ventilation device of Lamb is considered a fire blanket as it acts as fire barrier; it is well known in the art that a blanket is a thick covering layer.

***Claim Rejections - 35 USC § 102/103***

Claim 20 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) by Lamb (US 2,279,791).

With regards to claim 20: Lamb further discloses a metal mesh (20) has a rectangular cross-section (fig. 3). However, should it be argued that Lamb does not explicitly disclose the metal mesh is rectangular in cross-section, one of ordinary skill in the art would recognize that the metal mesh would obviously be rectangular so as to provide proper heat conductivity/dissipation of the rectangular grille body.

***Claim Rejections - 35 USC § 103***

Claims 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lamb (US 2,279,791) in view of Gold (US 4,121,563).

With regards to claim 22: Lamb discloses everything previously mentioned, but fails to disclose the metal mesh comprises stones to provide heat storage capacity. However, Gold discloses stones on a metal mesh so as to provide heat storage capacity (abstract). It is noted the ventilation device of Lamb would need to be oriented

vertically so as to take advantage of heat storage provided by the stone. it would have been obvious to one of ordinary skill in art at the time of the invention was made to modify the mesh of Lamb to include stones as taught by Gold in order to store heat that would otherwise normally pass through ventilation structure.

Claims 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lamb (US 2,279,791) in view of Dixon (GB 2 107 183 A)

With regards to claim 23: Lamb discloses everything mentioned, but silent with regards to a mesh comprising a honeycomb-patterned. However, Dixon discloses a device for a ventilation duct having a honeycomb patterned metal configuration for use in fire blocking/prevention (figs. 1-2; abstract & col. 1, lines 4-13). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the device of Lamb to include a mesh with a honeycomb configuration as taught by Dixon in order to provide a mesh that would provide increased structural integrity (i.e. rigidity) to the ventilation device.

Claims 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lamb (US 2,279,791).

With regards to claim 24: Lamb discloses everything previously mentioned including the screen mounted within a frame (15), but is silent with regards to metal mesh being arranged in a frame. However, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the device of

Lamb to have the entire structure within a frame including the grille body and metal mesh in order to provide a structure for ease of handling and installation.

Claims 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lamb (US 2,279,791) in view of Abu-Isa et al. (US 6,184,269).

With regards to claim 28: Lamb discloses everything previously mentioned, but fails to disclose the intumescent material comprises a hard phase high density polyethylene and a soft phase comprising at least one of chlorinated polyethylene and silicone rubber. However, Abu-Isa et al. discloses a intumescent material comprises a hard phase high density polyethylene and a soft phase comprising at least one of chlorinated polyethylene and silicone rubber (col. 2, lines 2-9). However, it would have been obvious to one of ordinary skill in art at the time of the invention was made to modify the intumescent material of Lamb to comprise a hard phase high density polyethylene and a soft phase comprising at least one of chlorinated polyethylene and silicone rubber in order to provide shielding under heat and fire. No new and unpredictable results would arise from substituting one known intumescent material for another.

#### ***Allowable Subject Matter***

Claim 21 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.



### ***Response to Arguments***

Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

The previous 112 second paragraph rejections have been withdrawn in view of the amendment filed 12/19/08.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following prior art is directed to fire resistant structures:

Beel (US 5,344,106); (GB 2 334 674 A); (GB 2 361 868 A); (GB 2 334 675 A); and (GB 2 159 051 A).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JESSIE FONSECA whose telephone number is (571)272-7195. The examiner can normally be reached on M-F 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Canfield can be reached on (571)272-6840. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. F./  
Examiner, Art Unit 3633

/Robert J Canfield/  
Supervisory Patent Examiner, Art Unit 3635